#### NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

#### FACT SHEET

(pursuant to NAC 445A.874)

Permittee Name: Gold Ranch Casino and RV Resort Type of Project: Remediation

Project Name: Gold Ranch Casino Address: 350 I-80 West

Permit Action: Renewal - UIC Draft Permit Issuance Verdi, Nevada 89439

Permit Number: UNEV99202 Injection Wells (#): two (2)

## A. <u>Description of Injection</u>

**Location:** The two injection wells are located at 350 I-80 West (Exit 2), in Verdi, Nevada 89439 in the NE ¼ of Section 19, T19N, R18E, MDB&M, in Washoe County. Groundwater is present at a depth of 27 to 64 feet below ground surface (bgs) and is moving in a northeast and east direction.

Latitude: 39° 30' 16" N Longitude: 119° 59' 42" W

Characteristics: The groundwater at this site contains very low levels of dissolved non-chlorinated petroleum hydrocarbons associated with leaking underground gasoline storage tanks. The injectate consists of extracted groundwater which is treated through a groundwater pump and treat system (GPT) (two equalization tanks, sediment filter, and two granular activated carbon (GAC) absorbers installed in series). The groundwater is then injected via two injection wells. The injectate must meet all drinking water standards before injection into the receiving waters. Free-phase hydrocarbon product has no longer been observed at the site.

## B. Synopsis

The Gold Ranch Casino and RV Resort functions as a casino, restaurant, mini mart, and retail gasoline sales outlet.

The remediation system is a groundwater extraction system which extracts the contaminated groundwater from the subsurface. The extracted water flows through a GPT system (described above) and is re-injected into the same aquifer from which it was extracted. (See Attachment A for Process Flow Diagram) The system is designed for approximately 20 gpm (28,800 gallons per day). Each of the two injection wells will have a maximum limit of 10 gpm. An air sparge/soil vapor extraction system is also being utilized at this site.

The groundwater is extracted from wells SVE/GWR-1 and SVE/GWR-2. Both extraction wells lie somewhat downgradient and cross-gradient from the contamination source. In the past, both extraction wells were within the contamination plume. The treated groundwater is eventually injected into two injection wells, UIW-1 and UIW-2. Both injection wells are on the upgradient side of the contamination source.

The remediation system was deactivated in June 2004 as site-wide dissolved contaminant

concentrations had decreased to below regulatory action levels. Following cessation of active remediation, dissolved contaminant concentrations began to increase; therefore the air sparge (AS) and GPT system were reactivated in May 2005.

In September 2005, the contamination plume decreased to a single monitoring well (SVE/AS-3) which is west of the extraction wells. SVE/AS-3 was found to contain concentrations of dissolved benzene (7.8 ug/L) and MTBE (34 ug/L) which exceeded the Federal and State Maximum Contaminant Levels (MCL) and the State Interim Action Level (IAL).

On December 27, 2005, the Washoe County District Health Department (WCDHD) concurred with the consultant's recommendation for cessation of active remediation at the site. Post-active remediation groundwater monitoring will continue for the next four calendar quarters.

## **C.** Receiving Water Characteristics:

In the past, groundwater sampling at the site has demonstrated the presence of dissolved non-chlorinated petroleum hydrocarbons in excess of the State and Federal action levels.

The geology encountered during well construction at the site consists of silty sand with cobbles, gravel, boulders, and silty gravel. Groundwater is present at approximately 50 feet below ground surface and the average local gradient is estimated to be approximately 0.019 ft/ft in the east-northeasterly direction, towards the Truckee River. The Truckee River lies approximately 650 feet from the site.

The Bureau of Water Pollution Control's ArcIMS Data Mapper Tool was checked for the location of Public Water Supply Wells in the area. There were eight wells within 7000 feet of the site. The well owners will be sent a copy of the Public Notice.

The groundwater quality at this site has demonstrated the following concentrations as determined by samples obtained during the last four quarters (December 2004 to September 2005):

Constituent	Existing Groundwater Concentration	Limit
Benzene	<1.0 - 110 ppb	5 ppb (State and Federal Limit)
Xylenes (total)	<2.0 - 1,170 ppb	200 ppb (State Limit)
МТВЕ	<1.0 - 140 ppb	20 ppb (State Limit)

#### D. Procedures for Public Comment

The Notice of the Division's intent to renew a permit authorizing the facility to discharge to the groundwater of the State of Nevada will be sent to the Reno Gazette Journal for publication.

The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on

the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. All written comments received during the comment period will be retained and considered in the final determination.

A public hearing on the proposed determination can be requested by the applicant, any affected state, any affected interstate agency, the regional administrator of EPA Region IX or any interested agency, person or group of persons.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings will be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

## E. Proposed Determination

The Division has made the tentative determination to renew the proposed permit for five years.

# F. Proposed Limitations and Special Conditions

Table 1

PARAMETER	FREQUENCY	LOCATION	LIMITATIONS
Benzene Toluene Ethylbenzene Total Xylenes MTBE (methyl tertiary butyl ether)	Daily for first three days, Weekly for first three weeks, and then Monthly thereafter	Discharge pipe at end of treatment prior to injection (GRC001-EC1)	Benzene - 5 ppb Toluene - 100 ppb Ethylbenzene - 100 ppb Total Xylenes - 200 ppb MTBE - 20 ppb
Benzene Toluene Ethylbenzene Total Xylenes MTBE	Quarterly	UIW-1, UIW-2, MW-3, MW-7, MW-12, MW-13, MW-14, SVE/GWR-1, SVE/GWR-2, SVE/AS- 2, SVE/AS-7, SVE/AS- 8, SVE/AS-9, SVE/AS- 10, SVE/AS-12, SVE/AS-17, and SVE/AS-18	Monitor and Report

Depth to Groundwater and Groundwater Elevation (amsl)	Quarterly	UIW-1, UIW-2, MW-3, MW-7, MW-12, MW-13, MW-14, SVE/GWR-1, SVE/GWR-2, SVE/AS- 2, SVE/AS-7, SVE/AS- 8, SVE/AS-9, SVE/AS- 10, SVE/AS-12, SVE/AS-17, and SVE/AS-18	Monitor and Report
Injection Rate	Continuously	UIW-1 and UIW-2	20 gpm cumulatively 10 gpm per well

# **G.** Rationale for Permit Requirements

The permit conditions will help to ensure that the injectate does not adversely affect the existing water quality or hydrologic regime.

Prepared by: Becky E. Linvill Date: January 30, 2006